Appendix J – Cremorne Wharf Depot (formerly Cremorne Wharf Foreshore)

J.1 Introduction
J.1.1 This appendix sets out the site selection process that we used and our rationale for identifying our preferred phase one and phase two consultation sites to intercept the Lots Road Pumping Station CSO.

Type of site
J.1.2 We need a worksite to connect the local combined sewer overflow (CSO), known as the Lots Road Pumping Station CSO to the main tunnel. To enable the connection to be made, the site needs to be as close as possible to the line of the existing sewer.

Site selection process
J.1.3 All potential worksites have been identified in accordance with our Site selection methodology paper (SSM), which involved a 'sieving' approach, commencing with identification of all potentially suitable areas of land (excluding concentrated residential sites and World Heritage Sites) and passing these sites through increasingly detailed levels of assessment to move from a long list to a draft short list, a final short list and finally a list of preferred sites for phase one consultation.
J.1.4 A plan showing all the sites considered for the interception of the Lots Road Pumping Station CSO and how they progressed during the site selection process can be found in Annex J.1.

Preferred site for phase one and phase two consultation
J.1.5 The table below identifies our preferred sites at phase one and phase two consultation to intercept the Lots Road Pumping Station CSO. Section J.2 of this appendix provides the details of how we identified our preferred phase one site. Sections J.3 to J.5 explain why we have identified a different preferred site for phase two consultation.

<table>
<thead>
<tr>
<th>Phase one consultation site:</th>
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<tbody>
<tr>
<td>Cremorne Wharf Foreshore</td>
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<table>
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<tr>
<th>Phase two consultation site:</th>
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<tbody>
<tr>
<td>Cremorne Wharf Depot</td>
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</tbody>
</table>

J.2 Site selection up to phase one consultation

Assessment of the long list sites
J.2.1 The long list of potential sites to intercept the Lots Road Pumping Station CSO was created by conducting a desktop survey of the land in the vicinity of the existing sewer.
J.2.2 In total, four sites were included on the long list. These sites were assessed having regard to the high-level considerations set out in Table
2.2 of the SSM (hereafter referred to as Table 2.2) including engineering (site size, site features, availability of jetty/wharf and access), planning and environment (heritage, landscape/townscape, open space and ecological) and community and property (neighbouring land uses, site use, Special Land/Crown Land and acquisition costs) considerations.

J.2.3 The table below provides a summary of the outcome of the Table 2.2 assessment in respect of the long list of sites considered for the interception of this CSO. Sites which were assessed as being the least constrained when considered against Table 2.2 considerations passed to the draft short list. This did not necessarily mean that these sites would ultimately be judged as suitable, but that no significant constraints were identified in relation to the high-level considerations addressed at Table 2.2. Sites that were judged to be more constrained and were recommended to be retained on the draft short list for more detailed assessment.

Table J.1 Long list to draft short list for the interception of the Lots Road Pumping Station CSO (Table 2.2 assessment)

<table>
<thead>
<tr>
<th>Site ID</th>
<th>Site name/description</th>
<th>Recommendation and rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>C10XA</td>
<td>Cremorne Wharf Foreshore</td>
<td>Recommendation: To draft shortlist</td>
</tr>
<tr>
<td>C10XB</td>
<td>Cremorne Wharf Depot</td>
<td>Recommendation: Not to draft shortlist&lt;br&gt;Rationale: The recycling facility is part of the civic infrastructure and the acquisition costs for this site are likely to be high.</td>
</tr>
<tr>
<td>C10XE</td>
<td>Cremorne Gardens</td>
<td>Recommendation: Not to draft shortlist&lt;br&gt;Rationale: There would be a long and difficult connection between the drop shaft and interception chamber of the sewer.</td>
</tr>
<tr>
<td>C10XF</td>
<td>Old water intake</td>
<td>Recommendation: Not to draft shortlist&lt;br&gt;Rationale: There is a long and difficult connection between the drop shaft and interception chamber of the sewer. The site size as identified is on the small side.</td>
</tr>
</tbody>
</table>

NB. The Site ID and Site name/description were used as an internal mechanism to record and describe the site but may be updated if necessary.

J.2.4 Of the four sites identified, only one was assessed as potentially suitable and passed to the draft short list while three sites were eliminated as being unsuitable.
Appendix J – Cremorne Wharf Depot (formerly Cremorne Wharf Foreshore)

Assessment of draft short list sites

J.2.5 The draft short list site identified for further assessment at the next stage was:

- C10XA: Cremorne Wharf Foreshore.

J.2.6 This site was further assessed by the engineering, planning, environment, community and property disciplines, having regard to the considerations set out in Table 2.3 of the SSM (hereafter referred to as Table 2.3). This stage of the process built on the information gathered and assessment undertaken at long list stage but focused on more detailed local considerations.

J.2.7 At this stage, we also consulted with each of the London boroughs and pan-London stakeholders, such as the Environment Agency and English Heritage, to seek their views on the suitability of sites for the short list.

J.2.8 The table below summarises the outcome of the Table 2.3 assessment of the draft short list of sites. Sites which were assessed as being the least constrained when considered against Table 2.3 considerations were retained on the short list to pass to the next stage of assessment. This did not necessarily mean that a site would ultimately be judged as suitable, but that no significant constraints were identified in relation to the considerations addressed at Table 2.3. Sites that were judged to be more constrained were not recommended to be retained on the short list for more detailed assessment.

<table>
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</tr>
</thead>
<tbody>
<tr>
<td>C10XA</td>
<td>Cremorne Wharf Foreshore</td>
<td><strong>Recommendation:</strong> Retain on short list</td>
</tr>
</tbody>
</table>

NB. The Site ID and Site name/description were used as an internal mechanism to record and describe the site but may be updated if necessary.

J.2.9 The draft short list site was assessed as potentially suitable and passed to the final short list.

Assessment of the final short list sites

J.2.10 The site identified for inclusion on the final short list and assessment at the next stage was:

- C10XA: Cremorne Wharf Foreshore.

J.2.11 A site suitability report (SSR) was prepared for the final shortlisted site. This report contained an assessment of the site’s suitability, having regard to engineering, planning, environment, community and property considerations. At this stage in the process, sites were assessed in isolation without comparison to other sites or regard to tunnelling strategy. Sites were evaluated by each discipline using technical knowledge and
professional judgement as appropriate, and assessed as either suitable, less suitable or not suitable from that discipline’s perspective.

J.2.12 A summary of the conclusions of each discipline’s assessment from the site suitability report is provided below.

**C10XA: Cremorne Wharf Foreshore**

J.2.13 Site C10XA is situated on the foreshore of the River Thames, within the Royal Borough of Kensington and Chelsea.

J.2.14 To the northwest of the site is a recycling centre. Further to the north is a newly built five-storey residential building. To the southwest is the now disused Lots Road Power Station, likely to be redeveloped. The site is bordered on the east, south and west by the River Thames.

J.2.15 **Engineering:** The site was assessed as suitable for use as a CSO site because it is relatively unrestricted in size and shape with good proximity to the main tunnel. The site also has good access provision through Cremorne Gardens or by river.

J.2.16 **Planning:** On balance, the site was assessed as being less suitable for use as a site to intercept this CSO. This is because of the visual impacts and loss of amenity to both Cremorne Gardens and nearby residential receptors with limited scope for mitigation. Loss of open space may also result from the site access through the gardens.

J.2.17 **Environment:** Overall, the site was assessed as less suitable for use as a CSO site. The site was considered likely to be suitable from the perspectives of transport, water resources (groundwater), land quality and air quality. However, the site was considered less suitable from the perspective of archaeology, built heritage and townscape, surface water, ecology, noise and flood risk. Substantial mitigation would be required to limit the impacts associated with using this site, particularly the considerable heritage and ecological risks associated with the foreshore at this location.

J.2.18 **Socio-economic and community:** The site was assessed as suitable for use as a CSO site. There will, however, be impacts associated with access through Cremorne Gardens, both during and after construction.

J.2.19 **Property:** The site was assessed as suitable for use as a CSO site as, being an undeveloped site, there is likely to be an acceptable acquisition cost. However, a special parliamentary procedure may be required to acquire this.

**Identification of the preferred site**

J.2.20 Following the completion of the SSR, a multidisciplinary workshop was held to consider the suitability of the shortlisted site based on the SSR assessment and to make a recommendation on whether the site should be identified as the preferred site.
Appendix J – Cremorne Wharf Depot (formerly Cremorne Wharf Foreshore)

J.2.21 The shortlisted site, Cremorne Wharf Foreshore (C10XA), was identified as the preferred site for the reasons summarised below:

- The configuration of the existing sewerage system and the densely developed nature of the area surrounding Lots Road Pumping Station means that there are no available and suitable sites on land.
- As the site is in the foreshore, a temporary cofferdam would be required. Construction access would be gained by a temporary road through Cremorne Gardens, and further consideration would need to be given to its position to minimise any potential impact. Access through the recycling centre during the construction phase was considered but deemed not to be feasible. This route could, however, be used for operational access.
- A number of planning, environmental and community issues were taken into consideration and identified as being of relevance. However, mitigation can minimise these impacts and prevent conflict with relevant planning policies in the adopted Kensington and Chelsea Unitary Development Plan.

J.3 Review of site selection following phase one consultation

Phase one consultation responses

J.3.1 As part of the site selection methodology, all feedback received during the phase one consultation was reviewed and taken into account in the development of our scheme for phase two consultation.

J.3.2 The main issues and concerns raised during phase one consultation in relation to the Cremorne Wharf Foreshore site included:

- use of Cremorne Gardens for access
- loss of open space
- impact on residential amenity
- increased traffic and congestion
- opposition to temporary or permanent works protruding beyond the existing river wall.

J.3.3 The main comments received in support of the preferred site included:

- the site is next to the waste transfer station so is out of sight and away from residents
- the after-use proposals look attractive.

J.3.4 More detail on the consultation responses related to this site and our response to the comments received are provided within the Report on phase one consultation.

J.3.5 Having taken all the comments received into account, particularly the strong objections to the creation of a temporary road through Cremorne Gardens to access the site, we reviewed the access to Cremorne Wharf foreshore. Following productive discussions with the Royal Borough of
Kensington and Chelsea, as owner of the waste transfer centre, about the feasibility of accessing our preferred site through the waste transfer facility rather than Cremorne Gardens, we discovered that the waste transfer station might be available as a CSO site. We also reviewed the need for a ventilation column and associated plant at this site and whether these installations could be reduced in size or removed altogether.

**Back-check process**

J.3.6 As a result of the new information about the potential availability of the waste transfer centre and further developments to the tunnelling strategy, we began a ‘back-check’ (as outlined in the *Site selection methodology paper*) to review our selection of Cremorne Wharf Foreshore as our preferred site.

J.3.7 This ‘back-check’ involved a targeted repeat of each relevant stage of our site selection process to reconsider which site would be most suitable for the interception of the Lots Road Pumping Station CSO. The following outlines the results from each stage of the back-check process.

**Assessment of the back-check long list**

J.3.8 The original long list sites for Lots Road Pumping Station CSO contained four sites (see Table J.1). These sites were reviewed along with any new sites identified in the back-checking exercise (ie, a reassessment to establish if there is any change of circumstances or new information has emerged).

J.3.9 All sites on the original long list were put on the back-check long list for this CSO. In addition, the following new site was added to the back-check long list:

- C10XG: Part of Lots Road Power Station site – this is an enlargement of the previous site C10XF.

J.3.10 Site C10XF was subsequently withdrawn as this was replaced by the new site detailed above.

J.3.11 It should be noted that consideration was also given to other alternative sites suggested by consultees. However, there were no other sites identified that were located within feasible distance to intercept this CSO.

J.3.12 The back-check long list sites were assessed against the engineering, planning, environment, community and property considerations set out in Table 2.2.

J.3.13 The table below summarises the outcome of the ‘back-check’ assessment of the back-check long list of sites. Sites which were assessed as being the least constrained when considered against Table 2.2 considerations passed to the next stage of assessment. This did not necessarily mean that these sites would ultimately be judged as suitable, but that no significant constraints were identified in relation to the high-level considerations addressed at Table 2.2. Sites that were judged to be more constrained were not recommended to be passed to the back-check draft short list for more detailed assessment.
Table J.3 Long list to draft short list for the interception of the Lots Road Pumping Station CSO (Table 2.2 assessment)

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<td><strong>Recommendation:</strong> To draft shortlist</td>
</tr>
<tr>
<td>C10XB</td>
<td>Cremorne Wharf Depot</td>
<td><strong>Recommendation:</strong> To draft shortlist</td>
</tr>
</tbody>
</table>
| C10XE   | Cremorne Gardens       | **Recommendation:** Not to draft shortlist  
| Rationale: There is a long and difficult connection between the drop shaft and interception chamber of the sewer. |
| C10XG   | Part of Lots Road Power Station site | **Recommendation:** To draft shortlist |

NB. The Site ID and Site name/description were used as an internal mechanism to record and describe the site but may be updated if necessary.

J.3.14 Full details are provided in back-check Table 2.2 assessment tables and accompanying plans.

J.3.15 Of the four sites identified, three were assessed as potentially suitable and passed to the draft short list, while one site was eliminated as being unsuitable.

**Assessment of the back-check draft short list sites**

J.3.16 The three back-check draft shortlisted sites were then further assessed by the engineering, planning, environment, community and property disciplines, having regard to the considerations set out in Table 2.3 of the SSM.

J.3.17 The table below summarises the outcome of the ‘back-check’ assessment of the draft short list of sites. Sites which were assessed as being the least constrained when considered against Table 2.3 considerations were retained on the back-check short list to pass to the next stage of assessment. This did not necessarily mean that a site would ultimately be judged as suitable, but that no significant constraints were identified in relation to the considerations addressed at Table 2.3. Sites that were judged to be more constrained were not recommended to be retained on the back-check short list for more detailed assessment.

J.3.18 The main rationale for the exclusion of these sites at this stage is summarised below.
Table J.4 Draft short list to final short list for the interception of the Lots Road Pumping Station CSO (Table 2.3 assessment)

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<td><strong>Recommendation:</strong> Retain on short list</td>
</tr>
<tr>
<td>C10XB</td>
<td>Cremorne Wharf Depot</td>
<td><strong>Recommendation:</strong> Retain on short list</td>
</tr>
</tbody>
</table>
| C10XG   | Part of Lots Road Power Station site | **Recommendation:** Not to draft shortlist  
  **Rationale:**  
  • Property – Use of the site would result in very high acquisition costs and it is likely that the residential development on the site will commence soon. |

NB. The Site ID and Site name/description were used as an internal mechanism to record and describe the site but may be updated if necessary.

J.3.19 Full details are provided in back-check Table 2.3 assessment tables and accompanying plans.

J.3.20 Of the three sites on the draft short list, two were assessed as potentially suitable and passed to the final short list, while one site did not proceed to the final short list.

**Assessment of the back-check final short list sites**

J.3.21 The two back-check final shortlisted sites identified for assessment at the next stage were:

- C10XA: Cremorne Wharf Foreshore
- C10XB: Cremorne Wharf Depot.

J.3.22 A site suitability report (SSR) was prepared for the new back-check final short list site and the SSR for the phase one shortlisted site was re-evaluated.

**C10XA: Cremorne Wharf Foreshore**

J.3.23 Some UDP policies have been superseded by the Core Strategy. Furthermore, the site bounds (but is not within) a conservation area. However, these are not significant changes that would alter the assessment or conclusion.

J.3.24 The adjacent waste transfer station is no longer in use and there is a planned redevelopment of the Lots Road power station site. However, the socio-economic and community recommendation remains **suitable**.

J.3.25 All other discipline recommendations remain unchanged.
C10XB: Cremorne Wharf Depot

J.3.26 Site C10XB is located at Cremorne Wharf off Lots Road in the Royal Borough of Kensington and Chelsea. The site comprises a safeguarded wharf containing a local authority depot, waste transfer station and a jetty.

J.3.27 The site is bound to the southeast by the River Thames, to the north by Thames Water’s Lots Road Pumping Station, which in turn fronts onto Lots Road, to the west by Lots Road Power Station and to the east by Chelsea Wharf. Chelsea Creek is located approximately 55 metres to the south of the site.

J.3.28 **Engineering:** The site was assessed as suitable for use as a CSO site as the waste transfer station site has enough area available and is reasonably unrestricted in shape. It is also in close proximity to the main tunnel and Lots Road Pumping Station.

J.3.29 **Planning:** On balance, the site was assessed as being suitable for use as a site to intercept this CSO. There are a number of planning designations and policies that are applicable to the site. The most relevant ones relate to the safeguarding of the waste and wharf facilities, residential amenity and transport. Residential amenity could be affected due to the proximity of some existing and future properties, but the site is fairly well enclosed and mitigation should be feasible. It is envisaged that the existing planning designations will only be affected for the period of construction, therefore the long-term use of the site for waste and wharf facilities can continue.

J.3.30 **Environment:** Overall, the site was assessed as less suitable for use as a CSO site. The site was considered likely to be suitable from the perspective of transport, townscape, ecology, water resources (surface water) and flood risk. However, the site was considered less suitable from the perspective of archaeology, built heritage, water resources (hydrogeology), air quality, noise and land quality, and investigation would have to be undertaken to assess whether effective mitigation could overcome these impacts.

J.3.31 **Socio-economic and community:** The site was assessed as suitable for use as a CSO site. Use of the site may result in impacts on nearby businesses and residences adjacent to the site and effective mitigation of any impacts may be difficult to achieve. Further residential properties are located along Lots Road but these are partially screened by existing buildings.

J.3.32 **Property:** The site was assessed as suitable for use as a CSO site. The site is partly vacant and therefore disturbance costs are likely to be acceptable. Acquisition costs are also likely to be acceptable due to the safeguarded wharf and waste facility classification of the site. A compulsory purchase of the site is also technically possible. However, there are acquisition risks if the local authority opposes its use as a CSO site. Furthermore, acquisition costs may increase significantly if the existing barriers to redevelopment are lifted.
J.4 **Preferred site recommendation**

J.4.1 Following the completion of the back-check process, a multidisciplinary workshop was held to compare the original preferred site (C10XA) with Cremorne Wharf Depot (C10XB).

J.4.2 This workshop took into account the findings of all the SSRs and the feedback received during the phase one consultation. On the basis of the assessments described above and professional judgement, it was agreed by all disciplines that **C10XB Cremorne Wharf Depot should become the preferred phase two consultation preferred site for the interception of the Lots Road CSO.** This meant that we believed this to be the most appropriate site, subject to further engagement with stakeholders and further design development to verify this conclusion prior to phase two consultation.

J.4.3 In summary, C10XB Cremorne Wharf Depot was identified as the most suitable site because:

- the site was assessed as suitable by the engineering, planning, community and property disciplines, and only assessed as less suitable by environment in the SSR assessment
- use of the site prevents the need to create an access road across Cremorne Gardens which was one of the main concerns identified during phase one consultation in relation to the foreshore site C10XA
- C10XB avoids the need to work in the foreshore and the associated cost, health and safety and environmental impacts
- the site utilises brownfield land and a safeguarded wharf.

J.5 **Site development**

J.5.1 Following the selection of Cremorne Wharf Depot as the recommended preferred site, further feedback from stakeholders and ongoing scheme development work have contributed to a number of further site changes.

**Engagement with stakeholders**

J.5.2 Engagement with stakeholders has been ongoing and has continued beyond the phase one consultation period. This has resulted in continual development of our proposals to take on board the comments made by stakeholders.

J.5.3 In particular, we have continually engaged through regular meetings and workshops with officers from the Royal Borough of Kensington and Chelsea, Transport for London (TfL), Greater London Authority (GLA), Port of London Authority (PLA), the Environment Agency and English Heritage with respect to developing the design and construction of our works, mitigating our impacts on the river and the scope of our environmental assessments. To ensure our design process is transparent, we undertook a series of design reviews, hosted and chaired by the Design Council CABE (formerly the Commission for Architecture and the Built Environment). The review for Cremorne Wharf Depot was
observed by the Royal Borough of Kensington and Chelsea and our pan-London stakeholders.

J.5.4 We have undertaken a series of drop-in sessions to present and discuss the potential suitability of Cremorne Wharf Depot as an alternative preferred site. These comments have been considered and details are provided in the Interim engagement report.

### Construction layout

J.5.5 In response to stakeholder engagement, phase one consultation responses and scheme development, the construction layout of the site has been altered to minimise impact on the local community and environment and is guided by operational and functional requirements. Particular factors at this site that have influenced the layout are as follows:

- The construction access to this site has been redesigned following the relocation of the site from the foreshore. Access would be via the existing depot accesses to Lots Road to avoid using Cremorne Gardens.

- The drop shaft has been moved from the foreshore and is now located within the depot. This is because the air management strategy for the main tunnel has been modified so that a drop shaft is no longer required directly on to the main tunnel in this location. This has resulted in a reduction in the drop shaft internal diameter from approximately 20m to 8m. Moving the drop shaft and related works inland away from the foreshore has removed any effects on river ecology, river navigation and river flows.

J.5.6 Further information on the construction logistics and the site layouts for the construction and operational phases can be found in the Cremorne Wharf Depot site information paper.

### Design

J.5.7 Since phase one consultation, we have progressed the design for the permanent use and appearance of the structures at Cremorne Wharf Foreshore, moving them from the foreshore to the Cremorne Depot site. The design of the permanent proposals follows our scheme-wide principles and has taken into account comments made and ongoing engagement with the Royal Borough of Kensington and Chelsea and other technical consultees.

J.5.8 Full details of design development for the Cremorne Wharf Depot site are provided in the Design development report.

### Phase two consultation

J.6.1 A final preferred site workshop was held in summer 2011 to verify the choice of preferred sites and to consider any outcomes of further engagement and scheme development. The conclusion reached was that C10XB: Cremorne Wharf Depot should become the phase two consultation preferred site for the interception of the Lots Road CSO.
J.6.2 Phase two consultation will provide an opportunity for the public to comment on our revised preferred site and scheme for the Thames Tunnel project, before we publicise our proposed application.
Annex J.1
This is a working draft plan which has been produced for the purpose of phase two consultation on the Thames Tunnel project. The information shown on the plan is illustrative of what will be required for the purpose of constructing and operating the Thames Tunnel project. The information shown on the plan may change as a result of Thames Water’s consideration of the responses received to phase two consultation and any further design development that is carried out.

Legend
- Local authority boundary (OS)
- Pumping Station
- CSO directly controlled

Site Selection
- No at Table 2.2
- No at Table 2.3
- Preferred site for the preferred tunnel route
- Not a preferred site

Note
Site C10XF has been retired.